

Bulletin

University of Toronto

Friday, February 4, 1977

No. 22

30 Year



A POWDER PUFF FOOTBALL VIGNETTE, snapped during the 12-team invitational tournament at the St. George campus on Saturday, Jan. 29.

Institutions may share regional computer centre

The maintenance of adequate computing facilities to serve both the academic and administrative needs of this University has become a serious problem, particularly in view of the present financial constraints and changing technology. A solution may lie in a regional computing centre. For this reason, a task force has been formed for the purpose of studying the feasibility of establishing such a centre. Members of the task force are: Dr. K. Okashimo, University of Guelph, Chairman; Dr. H. W. Smith, U of T; R. Mikkor, U of T; N. Foster, York University; W.W. Ralston, Ryerson Polytechnical Institute; and B.R. Miller, York-Ryerson Computing Centre.

The task force will be assisted in its studies by DMR and Associates, who will act as consultants. Their principals, who will be involved in the study, are Alain Roy of Montreal and Jim Kranias of Toronto. The main consideration of the task force will be to ascertain whether or not a regional computing facility will be sufficiently responsive to the particular needs

of its three principals: U of T, York University and Ryerson. The accessibility of the centre, the quality of its work and its ability to cope with the variety of demands which may come its way will be difficult to assess, but nevertheless this aspect of the study is all important. In addition, the terms of reference of the task force include financial and economic considerations, the location of the central facility, its staffing and its organizational structure.

The task force will initiate and undertake its responsibilities as quickly as possible. It asks the co-operation of all concerned in providing assistance necessary to assemble data. The target date for the completion of the report of the task force is May 31, 1977. No action will be taken on this report until there has been adequate time for study and response. Committees dealing with policy, control and operations of computer facilities will be consulted, as will individuals.

A.G. Rankin,
Vice-President, Business Affairs

Recommendations on TYP approved by Committee

A recommendation to reinstate the Transitional Year Program (TYP) was the main subject of discussion at the Academic Affairs Committee meeting, Thursday, Jan. 27.

Vice-President and Provost Donald Chant presented seven recommendations requiring the Committee's approval:

- The University recognizes that the need for a TYP program still exists.
- The TYP program at the University of Toronto should be reinstated by September 1977, if at all possible.
- The program curriculum

should consist of three courses: an English studies course, which will be of double weight and workload; a social, natural, and physical sciences course; and a regular first-year University course selected from a list to be prepared by the program staff. Successful completion of the regular course will be credited in the future University program of TYP students.

- Enrolment in the TYP program will be limited to 50 students.

- A program co-ordinator shall be appointed by the Vice-President and Provost and will report to the office of the Provost. The program co-ordinator will be

responsible for all aspects of the program. Other staff shall consist of course co-ordinators and supervisors, to be appointed by the Provost on the recommendations of the program co-ordinator. These administrative arrangements shall be reviewed in two years.

- The program co-ordinator shall appoint an advisory committee consisting of all staff in the program, an equal number of students, and two persons from outside the University. The Provost shall appoint the chairperson of this advisory committee, who will

report to the program co-ordinator.

- A student selection committee of five members shall be appointed by the Provost, with the program co-ordinator as chairperson. One member should be from the public sector, one from the private sector, and two from the University.

Dr. Chant noted that whereas his recommendations did not contain proposals on funding or housing the program, the issues of student assistance and physical facilities were being explored.

The Committee also approved a proposal for an English language facility requirement for Scarborough College, similar to the proposal passed recently by Governing Council for the Faculty of Arts and Science, St. George Campus. Scarborough's test will be administered in Sept. 1978, to students whose first language is not English and who have not completed at least two years in a Canadian high school.

Discussion of the proposal rais-

ed questions concerning an "all or nothing" admissions situation for students writing the test, and the Committee passed a recommendation that Wim Kent, director of Admissions, conduct a study as to the administrative feasibility of permitting students who "fail" the English facility test to be admitted to part-time study in Arts and Science at the main campus and at Scarborough College.

A recommendation for the transfer of the Higher Education Group from U of T to the Ontario Institute for Studies in Education for a trial period of three years beginning July 1, 1977, also passed. James Ham, Dean of the School of Graduate Studies, explained by way of background information that the Group had been set up 10 years ago and that it was still administratively responsible to Graduate Studies. Transfer to OISE would not be an academic change, he noted, but an administrative and financial one — a means of transferring fiscal responsibility for the Group to OISE's budget.

Provinces now control university funds

A new method of financing post-secondary education will come into effect April 1, 1977. The scheme, called Established Programs Financing, was agreed to by both the federal and provincial governments, and seems to indicate that the federal government will now be playing a diminished role in post-secondary education, and in health insurance.

Under the terms of the Program, the federal government has agreed to make its financial contributions to post-secondary education in two forms. Approximately half of the federal payment will consist of a transfer of additional tax points to the prov-

inces (a tax point is equal to 1 percent of income tax). The other half will be in the form of per capita cash grants to the provinces.

This new arrangement, which will be in effect for five years, replaces the current scheme whereby the federal government has been paying half the operating costs of post-secondary education under the Fiscal Arrangements Act, signed in 1967, and due to expire March 31, 1977. Whereas the provinces may not receive a great deal more money under the new Program, they will have greater autonomy over how it is spent.

The first stage in the financing of the Program — transfer of personal

income tax points — was completed on Jan. 1, 1977. The transfer of tax points will be equalized to the national average, and the tax portion will grow as the tax base increases in each province. The second stage — per capita cash grants to each province — will begin April 1, 1977, and the cash portion will be adjusted so that current per capita differences among the provinces will disappear within five years.

However, perhaps the most important aspect of the program is that it means a new decentralization of the federal government's power, since the provinces will now be free to manage their own financial affairs in the area of post-secondary education. Pointing to his faith in the provinces' maturity to do just that, Prime Minister Trudeau stated in the House of Commons December 14 that he felt the provinces "can be trusted, as it were, to continue putting a lot of their own money into these programs, and that is why our payments by way of tax points and cash grants let them float free and administer these programs without detailed federal overseeing."

TYP Program Co-Ordinator sought

Nominations for the position of Program Co-Ordinator of the Transitional Year Program are now being sought by the Vice-President and Provost, Dr. D.A. Chant. Candidates for the position must be members of the academic staff of the University of Toronto and have demonstrated administrative and teaching ability of a high order. The Program Co-Ordinator will be responsible for the general administration of the program, including the selection and evaluation of students, the hiring of other staff members and the organization of the academic program. The position is full-time with the exception that the Co-Ordinator will teach in the program.

The filling of this position is contingent on the approval of the recommendations now being forwarded by the Academic Affairs Committee to the Governing Council itself, concerning the reinstatement of the TYP. The Provost is calling for nominations prior to the consideration of these recommendations by the Governing Council because, if they are approved, there will be the need to implement the program immediately if students are to be admitted in September, 1977.

Nominations should be addressed to Dr. D.A. Chant, Room 219, Simcoe Hall, with an accompanying curriculum vitae.

Science & Medicine Library

The Science and Medicine Library will be moving back to 7 King's College Circle during the week of Feb. 14. To accomplish the move from its temporary quarters to its newly renovated building, the library will be closed on Monday, Feb. 14. It will open in its original location Tuesday, Feb. 15 to Friday, Feb. 18 from 8.30 a.m. to 6 p.m. Regular hours will resume on Saturday, Feb. 19.

The staff of the Science and Medicine Library will do their best to minimize any inconvenience this move may cause.

RESEARCH NEWS

Health Sciences Committee Research Board Priorities

At a recent meeting, the Health Sciences Committee established research support priorities for 1977 as:

1. Graduate students requiring full support to complete a graduate program
2. Summer undergraduate programs
3. Summer graduate students
4. Contingencies support

Information has been distributed to the health sciences divisions regarding the support programs and transmitting application information and guidelines. While support for graduate students in category one may be applied for at any time, the application deadline for the summer student support programs is Feb. 25. Applications are initiated by chairmen of departments or directors of institutes.

The Health Sciences Committee, chaired by Professor A.R. Ten Cate of the Faculty of Dentistry, is the standing committee of the University Research Board responsible for disbursing University-budgeted funds available for research in the health area as well as for disbursing funds available from a variety of trust accounts and

estates which are designated for support of research in the health area.

For further information, call 978-2163.

University Programs — External Agencies

All applicants for and recipients of awards from internal grants programs at the University are advised that it is current policy to eliminate from applications to external agencies the names of specific internal grants or applications. Applicants are requested simply to say *University support* (applied for or granted), when it becomes necessary to respond to an external agency requirement to list other funds applied for or granted.

The policy results from increasing indications that external agencies advise applicants to apply to specific internal programs and that some agencies treat certain internal granting programs as competing agencies or foundations. The result has occasionally been that funds awarded from an external source have been reduced by the amount of an internal award. University support programs are never intended as substitutions for external funding programs.



AS WE WERE: An old science lab shows that classes were somewhat smaller once upon a time.

Planning, perseverance meant summer jobs

Last summer, student unemployment was not quite as black as the press predicted, according to a survey conducted by the U of T Placement Centre. From 600 returned questionnaires, it was found that only 8% of those who tried, failed to find summer jobs.

This 92% employment rate, however, must be seen along with the study's other findings: one-third did not work as long as they wanted; one-third had to manage more than one job; and one-quarter applied for UIC. A majority of the respondents felt that finding

a job was more difficult in '76 than in '75.

On the positive side, the survey came up with several surprises. Contrary to the common accusation that students procrastinate in job-hunting, 65% looked for work before the peak months of April and May. Although employers complain that students have unrealistic expectations of the job market, the study showed that 71% would accept any job within reason, and 51% said they would return to their '76 job without hesitation. Of those surveyed, 29%

managed to find course-related work.

More than half the students surveyed claimed the media reports were too pessimistic. Response to the predicted gloom varied: some started the job-hunt earlier and pushed harder; others were too discouraged. Many settled for the first job they could find, and felt that employers exploited the tough competition.

The Placement Centre plans to repeat the survey this summer, but based on a wider sample of students.

M.H.

Society promotes Renaissance Studies

The Canadian Society for Renaissance Studies/Société canadienne d'Études de la Renaissance was founded last May during meetings of the Learned Societies at Laval University. The Society will hold annual conferences and foster close contacts among both English- and French-speaking Renaissance scholars across Canada.

The Society's first executive includes two members of the University: Professor F. David Hoeniger as president and Professor Olga Pugliese as secretary-treasurer. The late Professor Beatrice Corrigan was to have acted as Senior Advisor. Those wishing to join should contact Prof. Pugliese, Department of Italian Studies. Annual membership fee: \$10; for graduate students and Ph.D.'s without academic employment: \$5.

A small Renaissance Conference was held on Oct. 22-23, on the occasion of the first meeting of the Society's national executive, and in conjunction with the Toronto Renaissance Colloquium. Papers were given by Professor Rika Maniates of the Faculty of Music and by three visiting members of the executive: Professors Claude Sutto (Histoire, Montréal), Rosemarie Bergmann (History of Art, McGill), and J.M. De Bujanda (Directeur, Centre d'Études de la Renaissance, Sherbrooke).

One of the first decisions made by the Canadian Society for Renaissance Studies is that it will co-sponsor the Toronto-based journal, *Renaissance and Reformation*. Now in its twelfth year, the journal was founded by members of the Toronto Renaissance Colloquium and the Centre for Reformation and Renaissance Studies at Victoria College. It began as a small bulletin, but after a few years grew into a respectable scholarly journal, the only one in Canada devoted to the Renaissance.

For many years the journal has been ably and loyally directed by its editor, Professor Julius Molinaro of the Italian Department, who

has been primarily responsible for its quality and reputation. The board of the journal expresses its gratitude to Professor Molinaro

and at the same time welcomes as his successor Professor Richard Van Fossen of Erindale College.

O.P.

Task force established

The Planning and Resources Committee has recently established a task force to formulate plans for the redevelopment of the south-west campus. In carrying out its mandate, the task force will review:

- (1) the space requirements (qualitative and quantitative) for accommodating present and possibly future programs of the various academic divisions of the University;
- (2) the need for general facilities on the west campus (e.g. lecture rooms, parking);
- (3) the desirability of effective interaction among the academic units to be located on the south-west Campus;
- (4) the need for flexibility in providing buildings for academic programs;
- (5) the importance of economy in the sharing of resources among academic units.

It is expected that the task force will permit observers to attend meetings and it will shortly invite briefs from interested members of the University community.

PH D ORALS

Tuesday, February 8

Jane E. Aubin, Department of Medical Biophysics, "The Involvement of Microtubules in Concanavalin A Chinese Hamster Ovary Cells." Thesis supervisor: Prof. V. Ling. Room 309, 63 St. George St., 10 a.m.

Friday, February 11

David Stermole, Department of Anthropology, "Dialectology of a System of Carinthian Slovenian Adverbs." Thesis supervisor: Prof. J. Chew. Room 307, 63 St. George St., 2 p.m.



UNIVERSITY
of TORONTO

Bulletin

Because there will be no *Bulletin* on Friday, Feb. 18 (Reading Week), the deadline for material for the Feb. 11 issue has been extended to five o'clock on Monday, Feb. 7.

Normal publication and deadlines will resume with the Friday, Feb. 25 issue.

Published by the Department of Information Services,
45 Willcocks Street, Toronto, Ontario M5S 1C7
Telephone 978-2102

JOB OPENINGS

Below is a partial list of job openings at the University. Interested applicants should read the Promotional Opportunity postings on their staff bulletin boards, or telephone the personnel office for further information. The number in brackets following the name of the department in the list indicates the personnel officer responsible. Please call:

(1) Sylvia Holland, 978-6470; (2) Wendy Chin, 978-5468; (3) Manfred Wewers, 978-4834; (4) Ann Sarsfield, 978-2112; (5) Beverley Chennell, 978-7308.

Clerk Typist II (\$7,000 — 8,230 — 9,460)
Purchasing (2), Landscape Architecture (5), Physics (1)

Clerk Steno II (\$7,000 — 8,230 — 9,460)
Forestry (5)

Clerk Typist III (\$7,700 — 9,060 — 10,420)
Chemistry (1)

Clerk III (\$7,700 — 9,060 — 10,420)
Dean's Office, Medicine (4), Erindale College (2)

Secretary I (\$7,700 — 9,060 — 10,420)
Botany (1), Faculty of Education Library (1), Faculty Office, Engineering (5)

Secretary I — P/T (\$3,850 — 4,530 — 5,210)
Institute of Immunology (2)

Secretary II (\$8,470 — 9,970 — 11,460)
Botany (1), Vice-President, Business Affairs (1), Personnel (4), Music (2)

Secretary III (\$9,330 — 10,970 — 12,620)
Electrical Engineering (5)

Laboratory Technician II (\$10,370 — 12,200 — 14,040)
BBDMR (4), Neurology (4), Medicine (4), Pharmacology (4)

Laboratory Technician III (\$11,450 — 13,470 — 15,490)
Erindale College (2), Radiological Research Labs (4)

Editor I (\$9,330 — 10,970 — 12,620)
Guidance Centre (1)

Programmer I (\$9,850 — 11,590 — 13,330)
Anaesthesia (4)

Landscape Foreman (\$11,450 — 13,470 — 15,490)
Physical Plant (3)

Craftsman III (\$12,710 — 14,960 — 17,200)
Central Services — Medicine (4)

Engineering Technologist III (\$13,450 — 15,820 — 18,200)
Central Services — Medicine (4)

Professional Engineering Officer II (\$16,530 — 19,450 — 22,370)
Medicine (4)

Director — Academic Records (\$20,420 — 24,020 — 27,620)
Arts and Science (1)

BRIEFLY

The Varsity Fund is providing £1,000 toward publication by the Manchester University Press of two volumes in the Revels Plays series, whose General Editor is Professor F. David Hoeniger, Victoria College, Department of English.

The first is an edition of *The Fawn, 1606*, by John Marston, edited by Professor David Bolstein of the Centre for the Study of Drama and Victoria College. The second is an edition of *The Second Maiden's Tragedy*, an anonymous work of the late sixteenth or early seventeenth centuries, being edited from manuscript by Professor Anne Lancashire, University College.

The divisions of the Department of Rehabilitation Medicine are holding open house this Friday, Feb. 4 and Saturday, Feb. 5. Students and instructors in Occupational and Physical Therapy and in Speech pathology will demonstrate the latest techniques

and provide visitors with information about their vocations.

Dr. J. Page Harshman, a medical doctor who is a volunteer with U of T's Update fundraising campaign, found his car stuck in the snow and ice of the St. George campus on the evening of Jan. 12.

"I am sure I would have been there till spring," Dr. Harshman reports, "if several kind-hearted students had not come and lifted my car out of the icy ruts.

"I did not have a chance to thank them fully for, with their good deed done, they disappeared into the darkness. Nor did I get their names."

Dr. Harshman asks that we convey his appreciation to his benefactors, who are, he says, good neighbours and a credit to the University.

The Science Council of Canada tells us that doctoral enrolments in science programs has been declining drastically, and that the

majority of university researchers will reach retirement in the 1990s without Canada being able to replace their expertise from its own research manpower base. Concerned about this predicted erosion, the Council has formed a task force to study the matter. Called the Task Force on Research in Canada, its overall objective is to create a better climate for research — a task which, according to its mandate, will require it to demonstrate the importance and assess the health of science in this country, and to make policy recommendations for the improvement of the state and relevance of science in Canada.

To fulfill this objective, the task force will work with a variety of organizations, thus covering more topics than could be studied by the Council alone. Furthermore, it will attempt to ensure dialogue with the public and with governmental decision-makers. The task force anticipates that a meeting will soon take place with individuals from universities, governments and industry particularly concerned with the problem.

The Department of Information Services regrets that frozen locks on the glass poster cases located on the St. George campus, along with cruel winds and iced walks, sometimes interfere with regular poster postings.

Those attending the Camerata concert at Erindale on Sunday, Feb. 13 will be able to give their eyes as well as their ears a treat. During the intermission the Art Gallery will be open and sculptures by Andrew Bodor will be on view.

Six old-timers, who joined the Library staff more than 25 years ago, recently had lunch together to celebrate the addition of two more to their exclusive group. The new recruits were Biruta Eksteins, Binding, who joined January 15, 1952, and Theodore Jurkewycz, Circulation, who came January 17, 1952. There are now eight altogether, including Alice Moulton (1942), Circulation; Eleanor Skelton (1945), Circulation; Penny

Waldie (1947), Serials; Robert Blackburn (1947); Jean Gibson (1948), Circulation; and Janet Doty (1949), Binding.

The former International Studies Programme is now the Centre for International Studies. But only the name has changed. Activities are still carried on from room 208 in Trinity College, telephone 978-3350.

Last year was the first time since 1972 that the U of T has not improved on the previous year's safety record, according to James Murphy, University Safety Officer. The inordinate amount of snow and ice on campus has resulted in a great many "slip and fall" accidents, he says, and will result in a great many more if we do not exercise proper caution. As the weather conditions show no signs of ameliorating, Murphy urges us to beware of treacherous sidewalks, stairs and curbs, and finish the remaining winter months on, as it were, the right foot.

Pine trees to be given job of "radiation watchdogs"

by Jake Koekebakker

The effects of exposure to very low levels of radiation may not show up in people for years, but in pine trees these effects manifest themselves quickly and dramatically, a U of T radiobiologist has found. During a series of experiments completed recently at a dump for radioactive waste at Port Hope, Dr. Gordon M. Clark found that spruce and pine seedlings showed readily observable deviations from their normal growth patterns after only one month of exposure. Moreover, a row of Scotch pines that had been growing there for years was less than half the size of other Scotch pines of the same age growing nearby, and cones which looked considerably smaller than those from neighbouring Scotch pines were found to contain much seed which had not matured.

Subsequent laboratory tests at the Ramsay Wright Zoological Laboratories confirmed the conifers were exhibiting a kind of radiation sickness. "There is little doubt about it," Clark says. "These trees are very sensitive to radiation."

That conclusion is of more than academic interest. Radiation at the dumpsite, where radium and uranium residues were discarded between 1949 and 1954, is very weak but still strong enough to be far in excess of what is considered a safe level for people. Only a month's continuous exposure in the inner area would bring a person's radiation dose up beyond the permissible level.

What Clark foresees is the possibility of giving the pine trees a new job: that of radiation watchdog. "They would be ideal dosimeters — biological dosimeters," he says. "And not only would this be a good measurement system, it would also be something to which people could relate. A pointer going over a scale to indicate radiation — that doesn't mean anything to most people. But pine trees would."

The correlation between the level of radiation exposure and the trees' growth parameters appears so telling and consistent that Clark expects to be able to draw up "dose response curves" that will make it possible to determine fairly precisely, on the basis of such factors as root and stem growth and biomass of pine seedlings, the radiation dose received.

The work, which has been supported by a grant from the Environmental Approvals Branch of the Ontario Ministry of the Environment under its "Experience '76" program, has so far concentrated mostly on establishing a solid basis for these correlations. Clark's research team, which included students Kevin Bundy, Bob Algie, Bonnie Lee Mason and Stella Dahlin, planted more than 300 one-year-old seedlings of white spruce, and white and Scotch pine last summer in a trench alongside the inner fence at the dumpsite. They "harvested" 25 samples at 30-day intervals, then back in the lab compared these with samples from a control group, which had been planted in another location. Tiny crystals of lithium fluoride, which on exposure to radiation undergoes a change in crystal structure that can be measured by observing its thermal luminescence, were inserted with each plant.

What Clark's team found was that the Port Hope pines were exposed to 9 to 14 milliroentgen per hour, while the control plants received only 0.02 to 0.03

milliroentgen per hour, which is considered normal "background" radiation and is about half the dosage judged safe for human beings.

Much of the subsequent lab work was done by students in Clark's undergraduate course in radiation biology, and they quickly established some results that seemed conclusive: the weight of the irradiated plants fell well short of the weight of the control plants; root and stem growth were similarly retarded; while new growth was actually enhanced. "There is obviously a loss of biomass," Clark says, "which is a fundamental indication of the biological vigour of living organisms."

But that wasn't the only evidence the researchers turned up. They also collected a harvest of pine cones from the row of 12-year old pines adjacent to the dump's inner fence that was receiving a radiation dose of 1 milliroentgen per hour. The most significant aspect of the harvest was the discovery that "seed set" — the degree to which developing seed in the cone comes to maturation — averaged at most 25 percent, as compared to 85 percent for healthy trees. "That is a very high abortion rate," Clark says.

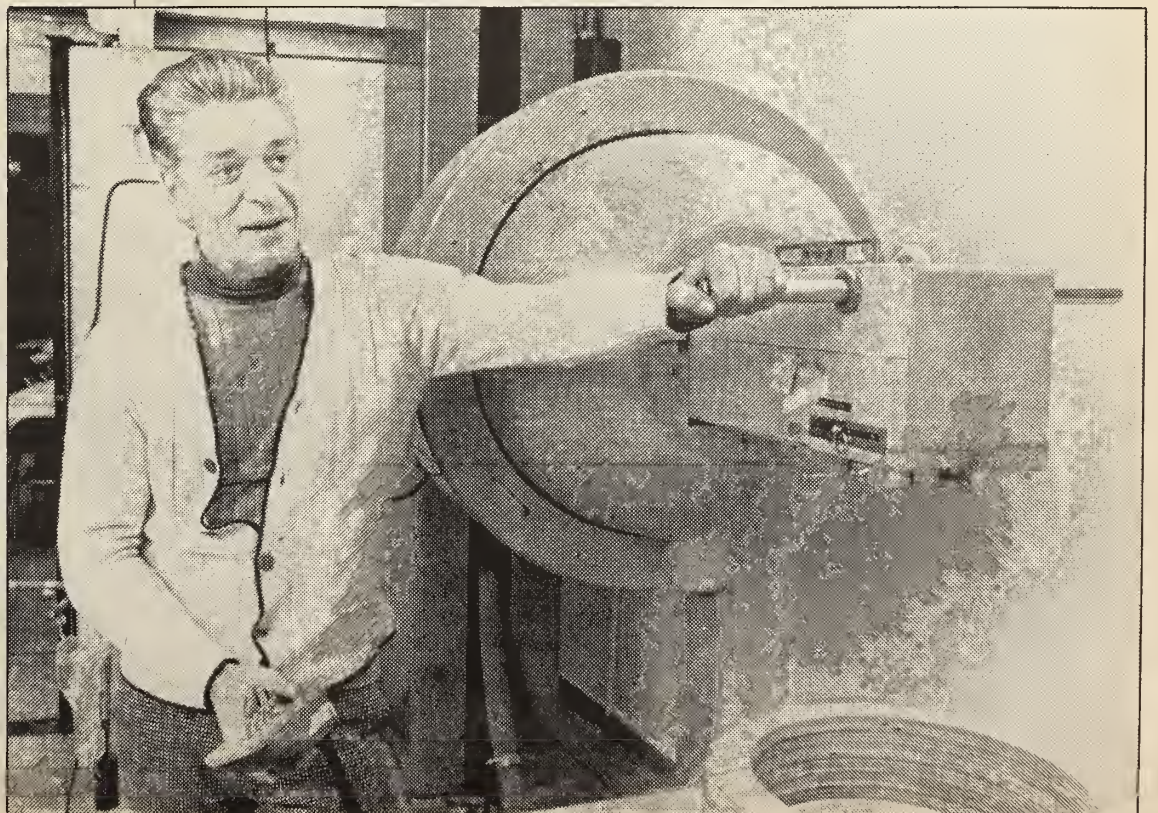
The next step will be to determine the viability of the seed that did mature. "We don't know yet whether these seeds will germinate and grow," Clark says. "We've planted only a few so far, and some of those seem to be doing fine, but we won't really know

anything conclusive until we have planted more and are able to study germination as well as survival of seedlings."

The bulk of the seeds, which have been carefully tagged as to their exact exposure dose, will be planted at the nursery of the Ontario Ministry of Natural Resources at Orono.

Every possibility that the observed effects could have been produced by other causes has checked out negative. "Our seedlings show no sign of deficiencies," Clark states. "The pH of the soil is between 6 and 7, which is about the right range for pine. We've also considered heavy-metal contamination, but so far there has been no real evidence of that either." Soil samples have been sent to the Whiteshell Nuclear Establishment of Atomic Energy of Canada Limited at Pinawa, Manitoba, for an assay by chemists there. In addition, plant samples will be tested at the Faculty of Forestry.

Meanwhile, Clark says he hopes to continue his investigations at the dump site, and may even extend the research to small mammals. "There are plenty of mice there," he remarks. Another possible area of investigation is the study of the effects of radiation on aquatic life, and Clark says one graduate student already has an eye on the clams that abound in the waters near Port Hope as the subject for a Master's thesis.



Dr. Gordon M. Clark, Department of Zoology, demonstrates how irradiated pine seeds were tested.

SESQUI U EVENTS

FRIDAY FEBRUARY 4

French Socialists in the 1970s (Lecture) Prof. Harvey Simmons, York University. 3037 Sidney Smith Hall. 8 p.m. (European Studies Committee, CIS and European Studies Group — Toronto Area)

Physics and Chemistry of Solid Surfaces Studied by Molecular Beams: A Biased View (Colloquium) Prof. G. Scoles, University of Waterloo. 158 Lash Miller Chemical Laboratories. 4 p.m.

Latin American Urban History (Seminar) Feb. 4 from 2.30 to 5.30 p.m., Feb. 5 from 10 a.m. to 12.30 p.m. Music Room, Hart House. Guest speakers: Prof. Richard Morse, Yale University; Prof. James R. Scobie, Indiana University; Prof. Milton Santos, Columbia University. Further information telephone Centre for International Studies, 978-3350. (Latin American Studies Committee, CIS)

Open House at Occupational and Physical Therapy, 256 McCaul St. Feb. 4 from 7.30 to 9.30 p.m. and Feb. 5 from 11 a.m. to 3 p.m.

Hans Jewinski reading his poetry. R-3103 Scarborough College. 4 p.m.

Dark of the Moon by Howard Richardson and William Berney, presented by University of Toronto Schools, Feb. 4 and 5 at 8 p.m. Please use 371 Bloor St. W. entrance. Tickets \$2.50 at door.

Inventions arrabalesques présenté par le Théâtre Mickities. Upper Brennan Hall. Feb. 4, 6, 7, 9 and 10 at 8.30 p.m. Tickets \$1 at door. Reservations 923-8893. (Semaine Française)

Viva la Muerte d'Arrabal (Le Ciné-Cent-Six) 179 University College. Two screenings, 12 noon and 8 p.m. (Semaine Française)

SATURDAY 5

Is the White Plague (Tuberculosis) Controlled? (Lecture) Dr. C.C. Gray, medical director, Ontario Thoracic Society. Convocation Hall. 8.15 p.m. (Royal Canadian Institute joint meeting with Ontario Thoracic Society)

Open House at Speech Pathology, 388 Elizabeth St. 11 a.m. — 3.30 p.m.

Les Précieuses ridicules, Molière, et **Pique-nique en campagne**, Arrabal. Joué par la troupe SMC. Room 3 New Academic Building, Victoria College. Feb. 5, 7 and 8 at 8.30 p.m. Reservations 978-3167 or 921-3151 Ext. 306 (Semaine Française)

Mactatio Abel and **The Murder of Abel** from the English mystery cycles, presented by Poculi Ludique Societas. Debates Room, Hart House at 8.30 p.m. Feb. 5, 6, 11, 12 and 13. Reservations 978-5096 or 536-9556.

The Taming of the Shrew, Richard Burton and Elizabeth Taylor. North auditorium, OISE, 252 Bloor St. W. 8 p.m. Tickets \$1, telephone 978-5076. (Woodsworth College Students' Association film festival '76)

SUNDAY 6

The King's Witchcraft: Macbeth and Theatre History (Fifth lecture in special Sesquicentennial series at Science Centre) Graduate Centre for the Study of Drama. Main auditorium, Ontario Science Centre. 3 p.m.

Orford String Quartet (Second of six concerts in Beethoven series) Walter Hall, Edward Johnson Building. 3 p.m. Tickets \$6, students and senior citizens \$4. Box office 978-3744.

Open House at Faculty of Dentistry. 1 — 4 p.m.

MONDAY 7

Recent Archaeological Work in Jordan (Illustrated lecture) Dr. James A. Sauer, American Schools of Oriental Research, Amman, Jordan. 323 Textbook Store. 4 p.m. (Near Eastern Studies and SGS)

Héroïsme et parodie dans le théâtre québécois (Lecture) Prof. Jean-Cléo Godin, Université de Montréal. Croft Chapter House. 4 p.m. (Please note correct time) (Semaine Française)

Atherosclerosis and Genetic Disorders of Cholesterol Metabolism (Guest seminar) Dr. Michael S. Brown, Southwestern Medical School, University of Texas, Dallas. North classroom, Toronto General Hospital. 12 noon. (BDDMR)

The Low Density Lipoprotein Pathway for the Control of Cholesterol Metabolism (Guest seminar) Dr. Michael S. Brown, Southwestern Medical School. 417 Best Institute. 4 p.m. (BDDMR)

The Clinical Application of Experimental Studies of Intracranial Pressure and Cerebral Blood Flow: Two Steps Forward and One Step Back? (Lecture) Dr. J. Douglas Miller, Virginia Commonwealth University; 1977 William S. Keith Visiting Professor of Neurosurgery. Osler Hall, Academy of Medicine. 5 p.m.

The Idea of a University Revisited (First of four lectures in St. Michael's Sesquicentennial series **On the Idea of a University**) J.M. Cameron, University of St. Michael's College Professor. Upper Brennan Hall. 8 p.m.

Non-radial Pulsations in Early to Mid-B Stars (Colloquium) Dr. Myron A. Smith, University of Texas, Austin. David Dunlap Observatory. 4 p.m.

Replication of infectious pancreatic necrosis virus (Seminar) Dr. Peter Dobos, University of Guelph. 235 FitzGerald Building. 3.30 p.m. (Microbiology & Parasitology)

La Chanson populaire du Canada

Rutherford (Wednesday afternoon pop concert) East common room, Hart House. 12 noon.

Fraser Sutherland, visiting poet reading in 1016 New College. 8 p.m.

L'Architecte et l'Empereur d'Assyrie, Arrabal. Présenté par le Théâtre du P'tit Bonheur. Harbourfront Theatre, 235 Queen's Quay West at 8.30 p.m. Tickets \$2 from French Department, 2nd floor, 7 King's College Circle, 978-3167. Tickets must be bought in advance, none available at door. (Semaine Française)

Skulene 7T7, Engineering Society annual musical-comedy revue. Hart House Theatre Feb. 9 — 12 at 8.30 p.m. Tickets \$2.50 Wednesday, Thursday and \$3 Friday, Saturday. Box office 978-8668.

The Moor's Pavane, Choreographer at Work, A Dancer's World and Appalachian Spring (Films) Special Sesquicentennial program of films on the language of music and dance. Upper Lounge, Benson

Birdsongs (Second in series of eight lectures **Communication in Animals**) Prof. Bruce Falls, Department of Zoology. ROM theatre. 8 p.m.

Présentation de diapositives sur la France par Prof. Andrew Oliver, Department of French. 113 New Academic Building. 12 noon. (Semaine Française)

The International Centres for Agricultural Research and Their Role in World Food Production (Seminar) Dr. O.M. Solandt, Institute for Environmental Studies. 211 Haultain Building. 4 p.m.

Of Guardsmen, Garters and Gore: From the Archives of the Secret Chancellery of Investigatory Affairs (Seminar) Prof. John Keep, Department of History. Upper Library, Massey College. 8 p.m. (Please let Russian & East European Studies office know if you plan to attend)

The Meaning of Life: The Magic of Music. Members of musical group Harvest will perform and discuss their music. International Student Centre. 12.30 p.m. (Ontology Club meeting)

Student Chamber Music Concert. Walter Hall, Edward Johnson Building. 2.10 p.m.

The School for Wives by Molière. Student Theatre Production at Erindale. Feb. 10 at 1 and 8 p.m., Feb. 11 and 12 at 8 p.m. Theatre Studio, North Building. Information 828-5349. (Semaine Française)

G.B.S. — A Preface to George Bernard Shaw. Drama presentation. Feb. 10 and 11 at 8 p.m. TV Studio, Scarborough College.

Le Corbusier (Fifth in Hart House Art Committee film series) Art Gallery. Two screenings, 12.10 and 7 p.m.

L'Arbre de Guernica d'Arrabal; to be preceded by short films on contemporary theatre. Arrabal will be present to discuss his film after the showing. Cinéma-Lumière, 280 College St. 8 p.m. Tickets \$2 from French Department, 2nd floor, 7 King's College Circle, 978-3167. Tickets must be bought in advance, none available at door. (Semaine Française)

FRIDAY 11

Images of Man for the Future (Sixth in series of eight lectures in Lunch & Learn Club series **Genetics and Man**) Dr. E.J. Reed, Professor of Divinity, Trinity College. Inns College. 12.15 p.m. Admission \$2. (Continuing Studies)

La Fonction du langage dramatique dans Va et Vient (Lecture) Karen Laughlin, graduate student. Lecture includes performance of play. Rhodes Room, Trinity College. 2.10 p.m. (Semaine Française)

Carbonyl Clusters (Colloquium) Prof. Brian Heaton. University of Kent. 158 Lash Miller Chemical Laboratories. 4 p.m.

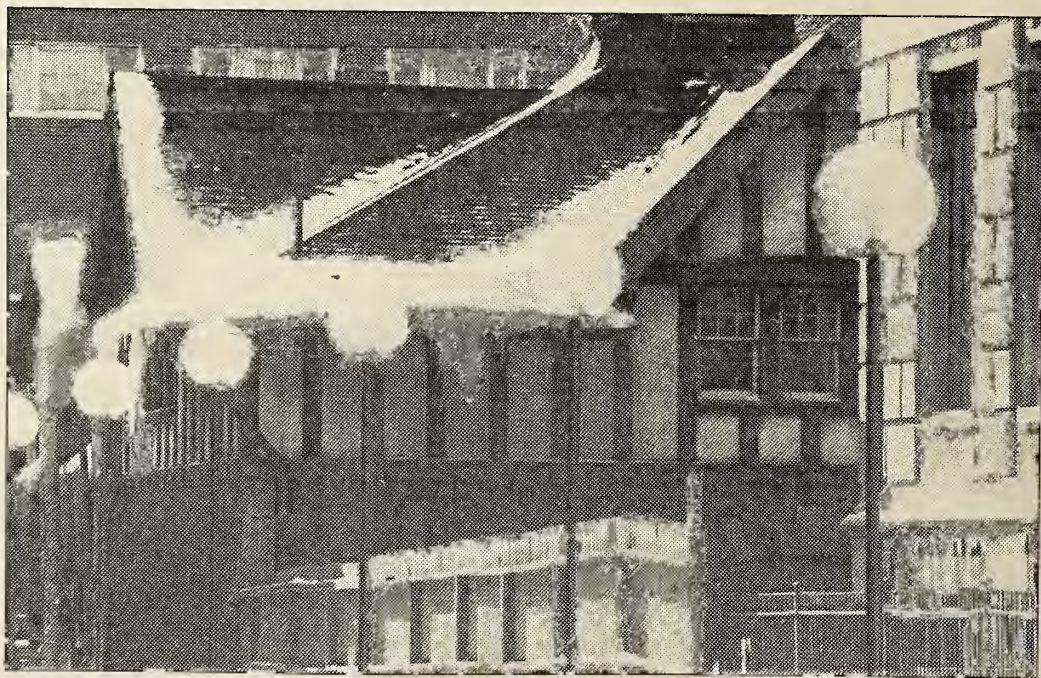
Sarah Bernhardt (Causerie) Prof. Laure Rièse, Department of French. Rhodes Room, Trinity College. 12.30 p.m. (Semaine Française)

SATURDAY 12

Pain-Brain Relationships (Lecture) Dr. J. Alan Walters, Departments of Medicine and Psychiatry. Convocation Hall. 8.15 p.m. (Royal Canadian Institute)

SUNDAY 13

The quest for an artificial pancreas (Sixth lecture in special Sesquicentennial series at Science Centre) Dr. Bernard Leibel, Banting & Best Department of Medical Research. Main auditorium, Ontario Science Centre. 3 p.m.



The lights of St. Michael's College seem to be burning brightly despite the fact that the sun this winter's day was evidently at its zenith. Perhaps an illusion, caused by cold weather?

University of Western Ontario Faculty Singers and Wind Ensemble. Exchange program. Walter Hall, Edward Johnson Building. 8.30 p.m.

Distant Voices: Verse from Ancient Rome to Modern New Zealand. Poetry reading by Prof. Kenneth Quinn, Department of Classics. Women's Union Lounge, 79 St. George St. 4 p.m.

Duncan Grant at Charleston (Film by Quentin Bell, **Focus on Bloomsbury** Sesquicentennial program) H-216 Scarborough College. 3 p.m.

TUESDAY 8

Arrabal y su teatro en exilio (Lecture) Prof. Angel Berenguer, State University of New York, Albany. Room 3 New Academic Building. 4 p.m. (Semaine Française)

The Arts and Bloomsbury (Lecture on Lord Keynes and the Bloomsbury group in **Focus on Bloomsbury** Sesquicentennial program) Prof. D.E. Moggridge, Department of Political Economy. R-3103 Scarborough College. 4 p.m.

The Social Impact of a Medical Information System on Professional Care in Hospitals (Lecture) Prof. Michael Enright, State University of New York at Stony Brook. 235 FitzGerald Building. 4 p.m. (Health Administration)

français (Causerie avec enregistrements) Catherine Duval. Upper Brennan Hall. 12 noon. (Semaine Française)

The Hero as Artist (Fifth film in series **Civilization**, Kenneth Clarke) Scarborough College, two screenings H-310 at 12 noon and S-128 at 4 p.m.

WEDNESDAY 9
Le Théâtre d'Arrabal et les objets (Lecture) Prof. Albert Chesneau, Department of French. 1017 New College. 4 p.m. (Please note correct time) (Semaine Française)

The Problem of Medical Malpractice: Trying to Round Out the Circle (Ninth annual Cecil A. Wright Memorial Lecture) Prof. Guido Calabresi, Yale University Law School. Moot Court, Faculty of Law. 4 p.m.

Some Problems in the Marxist Analysis of Pre-Class Societies (Sociology colloquium) Prof. Richard B. Lee, Department of Anthropology. Lounge, Borden Building. 2.45 p.m.

Fungi of the Arctic and Sub-Arctic Regions (Research seminar) Dr. O.K. Miller, Virginia Polytechnic Institute. Room 7 Botany Building. 4 p.m.

Dianne Heatherington and Mark

Building. Feb. 9 from 7 to 9 p.m. and Feb. 10 from 12 noon to 2 p.m. (Women's Athletic Association)

THURSDAY 10
Réflexions sur le théâtre (Lecture) Fernando Arrabal. Emmanuel College Lecture Hall. 4 p.m. (Semaine Française)

The City in Literature and History (Lecture) Prof. R. Lehan, University of California at Los Angeles. 240 Gerald Larkin Building. 4.10 p.m. (English and SGS)

Renan's Philological Laboratory (Second in series of five lectures, **Theory and the Text**) Prof. Edward Said, Columbia University. Room 3 New Academic Building. 4.15 p.m. (Comparative Literature)

Social Change and the Experience of Childhood (Ninth in series of 12 lectures **The Child in the City: Today and Tomorrow**) Dr. Stephen Klineberg, Rice University. Auditorium, Medical Sciences Building. 7.30 p.m.

Universities, Colleges and the State (Second of four lectures in St. Michael's Sesquicentennial series **On the Idea of a University**) J.M. Cameron, University of St. Michael's College Professor. Upper Brennan Hall. 8 p.m.

The Meaning and Structure of